

Figure 1
Map of Human IL-17 Like cDNA (SEQ ID NO:1) and
Amino Acid (SEQ ID NO:2) Sequences

1	CTCAAGTCACTCCCTAAAAAGACAGTGGAAATAAAATTGAATAAACAAAAACAGGCTTGCT	
61	GAAATAAAATCAGGACTCCTAACCTGTCCAGTCAGCCTGCTTCCACGAGGCCTGTCAG	
121	TCAGTGCCCCACTTGTGACTGAGTGTGCAGTGCCCAGCATGTACCAGGTGGTTGCAATTCT	
1	M Y Q V V A F L	
181	TGGCAATGGTCAATGGGAACCCACACCTACAGCCACTGGCCCAGCTGCTGCCCCAGCAAAG	8
9	A M V M G T H T Y S H W P S C C P S K G	28
241	GGCAGGACACCTCTGAGGAGCTGCTGAGTGGAGCACTGTGCCTGTGCCTCCCCCTAGAGC	
29	Q D T S E E L L R W S T V P V P L E P	48
301	CTGCTAGGCCCAACCGCCACCCAGAGTCCTGTAGGGCCAGTGAAGATGACCCCTCAACA	
49	A R P N R H P E S C R A S E D G P L N S	68
361	GCAGGGCCATCTCCCCCTGGAGATATGAGTTGGACAGAGACTTGAACCGGCTCCCCCAGG	
69	R A I S P W R Y E L D R D L N R L P Q D	88
421	ACCTGTACCACGCCCCGTTGCCCTGTGCCCCGCACTGCGTCAGCCTACAGACAGGCTCCCA	
89	L Y H A R C L C P H C V S L Q T G S H M	108
481	TGGACCCCGGGGCAACTCGGAGCTGCTTACCACAAACCAGACTGTCTTACCGGCGGC	
109	D P R G N S E L L Y H N Q T V F Y R R P	128
541	CATGCCATGGCGAGAAAGGCCACCCACAAGGGCTACTGCTGGAGCGCAGGCTGTACCGTG	
129	C H G E K G T H K G Y C L E R R L Y R V	148
601	TTTCCCTTAGCTTGTGTGTGTGCGGGCCCCGCTGTGATGGGCTAG	643
149	S L A C V C V R P R V M G * 162	

Figure 2A

(Map of Mouse IL-17 Like cDNA (SEQ ID NO:3) and Amino Acid
(SEQ ID NO:4) Sequences with Predicted Signal Peptide

1	ATGTACCAGGCTGTTGCATTCTTGGCAATGATCGTGGGAACCCACACCGTCAGCTTG	19
	M Y Q A V A F L A M I V G T H T V S L	
58	CGGATCCAGGAGGCTGCAGTCACTTGTCCAGCTGCTGCCAGCAAGAGCAAGAACCC	
11	R I Q E G C S H L P S C C P S K E Q E P	39
118	CCGAGGAGTGGCTGAAGTGGAGCTCTGCATCTGTGTCCCCCAGAGCCTCTGAGCCAC	
31	P E W L K W S S A S V S P P E P L S H	59
178	ACCCACCAGCAGAAATCCTGCAGGGCCAGCAAGGATGGCCCCCTCAACAGCAGGGCCATC	
51	T H H A E S C R A S K D G P L N S R A I	79
238	TCTCCTTGGAGCTATGAGTTGGACAGGACTTGAATCGGGTCCCCCAGGACCTGTACCAC	
71	S P W S Y E L D R D L N R V P Q D L Y H	99
298	GCTCGATGCCCTGTGCCACACTGCGTCAGCCTACAGACAGGCTCCCACATGGACCCGCTG	
91	A R C L C P H C V S L Q T G S H M D P L	119
358	GGCAACTCCGTCCCACTTTACCACAACCAGACGGTCTTCTACCGCGGCCATGCCATGGC	
111	G N S V P L Y H N Q T V F Y R R P C H G	139
418	GAGGAAGTACCATCGCCGCTACTGCTTGGAGCGCAGGCTCTACCGAGTCTCCTTGGCT	
131	E E G T H R R Y C L E R R L Y R V S L A	159
478	TGTGTGTGTGCGGCCCGGCTCATGGCTTAGTCATGCTCACCACCTGCCTGAGGCTGA	
160	C V C V R P R V M A *	170
538	TGCCCCGTTGGAGAGAGGGCCAGGTGTACAATCACCTTGCCAAATCGGGCCGGTTCAA	
598	GCCCTCCAAAGCCCTACCTGAAGCAGCAGGCTCCCGGACACAAGATGGAGGACTTGGGGAG	
658	AAACTCTGACTTTTGCACCTTTTGGGAAGCAGCTTTTGGGAAGGAGCAGGTTCCGCTTGTGC	

Figure 2B

718 TGCTAGAGGATGCTGTTGTGGCATTTCTACTCAGGAACGGACTCCAAGGCCCTGCTGACC
 778 CTGGAAGCCATACCTCTGGCTCCTTTCCCTGAATCCCCAACTCCTGGCACAGGCACATT
 838 TCTCCACCTCTCCCCCTTTGCCCTTTTGTGTGTTGTGTGTCATGCCAACTCTGCCGTGC
 898 AGCCAGGTGTAATTGCCTTGAAGGATGTTCTGAGGTGAAAGCTGTATCGAAAAGTGAAG
 958 AGATTATCCAAATAAACATCTGTGTTTAAAAAATAAAAAAAAAAAAAA 1496

Map of Non-Secreted Form of Mouse IL-17 Like cDNA (SEQ ID NO:9), and
 Corresponding Amino Acid Sequence (SEQ ID NO:10)

1	CCGGGCAGGTGCCCTCGGCGGTCCCAAGCTTAGGGAAGCTCCAGGTGCTTTGGGAAAT	
61	GAAGAAAAAGGCCACCGAGCAAAAAGGAACAGAGAAGGGAGGAGCAGTGCTGTGGGCTC	
121	GCCTAGGGTCGAGGGCCATTATCACCTACAAATCAGAAATGTGGAGTGCTATTCTAGAGG	
181	TCTCCATCTTTGGCCATTGTGGGTGCTCAGAAAAGTGTATGGGGTTGTCCCATTGCCA	
241	AGAACAGCTTCTGCTTACCAGCAGGTGCTGACCTCTTTCCCCAGAGGCACAGGGAAGGAA	
301	TTCCAGCCCCGGTTGGCTGCCAGAGGCTTCTCTGGCGTTGGGTACAGAGGCAGAGAAAG	
361	AAACCCCAAAATGTCTCCTATGAAAAACAATGTCCCGTCATCCAGGCCAGATCATCTGC	
421	AGTGTCAACAGTTGAGACAAGAAGCTGGGGTCATTTTCTGTGCCCTAAGAGTGCCGTGTTCT	
481	GCACTGGCCAAAGGCTGTTGCATTTCTTGGCAATGATCGTGGGAACCCACACCGTCAGCTTG	
	M I V G T H T V S L	10
541	CGGATCCAGGAGGGCTGCAGTCACTTGCCCAGCTGCTGCCCCAGCAAGAGCAAGAACCC	
11	R I Q E G C S H L P S C C P S K E Q E P	30

Figure 2C

[illegible]

Figure 3A

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L (SEQ ID NO:2),
with a Known Human IL-17 Family Member Amino Acid Sequence, hIL-17

(SEQ ID NO:5)

Smith-Waterman score: 155; 25.0% identity in 160 AA overlap

hIL-17L	10	20	30	40	50	60
	XNQDSXPAPVSL	PRGLSVSAPLVTECAVPSMYQVVAFLAMVMGTHITYSHWPSCCP	SKGQ			
hIL-17			: :::: : : : : : : : : : :			
			MTPGKTSLVSL	LLLLLSLEAIVKAGITIPRNP	GCPN	SEDK
			10	20	30	
hIL-17L	70	80	90	100	110	120
	DTSEELLRWSTVP	PPLEPARPNRHPESC	RASEDGPLNSRAISPWRYELDRDLNRLPQDL			
hIL-17	: : : :	: : : :	: : : :	: : : :	: : : :	: : : :
	NFPRTVMVNLNI	-----HNRNTNTNPK--RSSD---	YNRSTSPWNLHRNEDPERYP	PSVI		
	40	50	60	70	80	

Figure 3B

hIL-17L	130	140	150	160	170	180
	YHARCLCPHCVSLQTGSHMDPLGNSVPLYNQTVFYRRPCHGEEGTHRRYCLERRLYRVS					
hIL-17	90	100	110	120	130	140
	WEAKCRHLGCIN--ADGNVDYHNMNSVPIQQEILVLRREPPhCPNS----FRLEKIL--VS					
hIL-17L	190					
	LACVCVRPRVMA					
hIL-17	150					
	VGCTCVTPIVHHVA					

Figure 4
Pile-Up of Human IL-17 like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with a Known Human IL-20 Amino Acid Sequence, hIL-20 (SEQ ID NO:6)

SCORES	Init1: 124	Initn: 124	Opt: 175			
Smith-Waterman score:	175;	36.7% identity in 90 aa overlap				
hIL-17L	70	80	90	100	110	120
	RWSTVPVPPLEPARPNRHPE	SCRASEDGPLNSRAIS	PWRYELDRDLNRLPQDLYHARCLC			
		:::	:::	:::	:::	:::
hIL-20	70	80	90	100	110	120
	RNIEEMVAQLRNSSELAQRKCEVNLQLWMSNKRSLSPWGYSINHDPSRIPVDLPEARCLC					
hIL-17L	130	140	150	160	170	180
	PHCVSLQTGSHMDPLGNSVPLYHNQTVFYRRPCHGEEGTHRRYCLERRLYRVSLA-CVCV					
	: ::	:::	:::	:::	:::	:::
hIL-20	130	140	150	160	170	
	LGCVNPFTMQE-DRSMVSVPVF-SQVPVRRRLCPPPRTGP--CRQRAVMTIVAGCTCI					
hIL-17L	190					
	RPRVMA					
hIL-20	F					

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with a Known Human IL-17 Amino Acid Sequence, hIL-17b (SEQ ID NO:7)

Figure 6B

hIL-17L	120	130	140	150	160	169
	LNRLPQDLYHARCLCPHCVSLQTGSHMDPLGNSVPLYHNQTVFYRRPCHGEEG----	THR				
hIL-17c	120	130	140	150	160	170
	EDRYPQKLAFAECLCRGCIDARTGRETAAL-NSVRLQLQSLVLRRRPC-SRDGSGGLPTPG					
hIL-17L	170	180	190			
	RYCLERRLYRVSLACVCVRPRVMA					
hIL-17c	180	190				
	AFAFHTEFIHVPVGCTCVLPRSV					

Figure 7

Northern Blot Expression Analysis of TH00-018 Necropsied Transgenic Founders

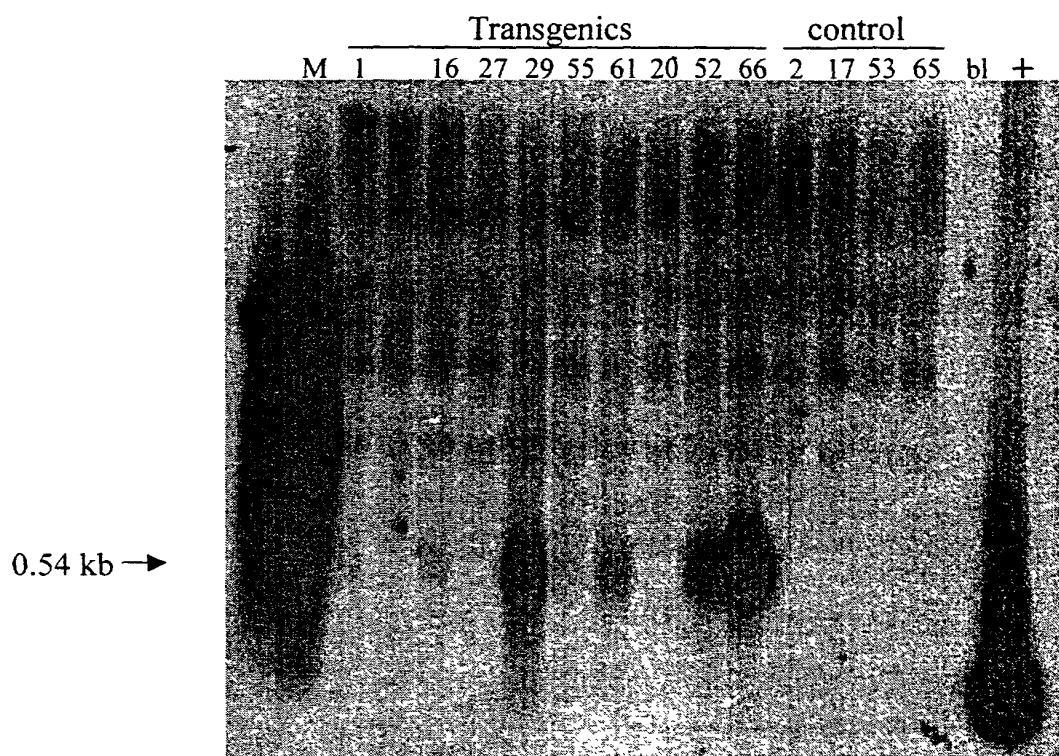


Figure 8

Northern Blot Expression Analysis of TH00-018 Hepatectomized Transgenic Founders

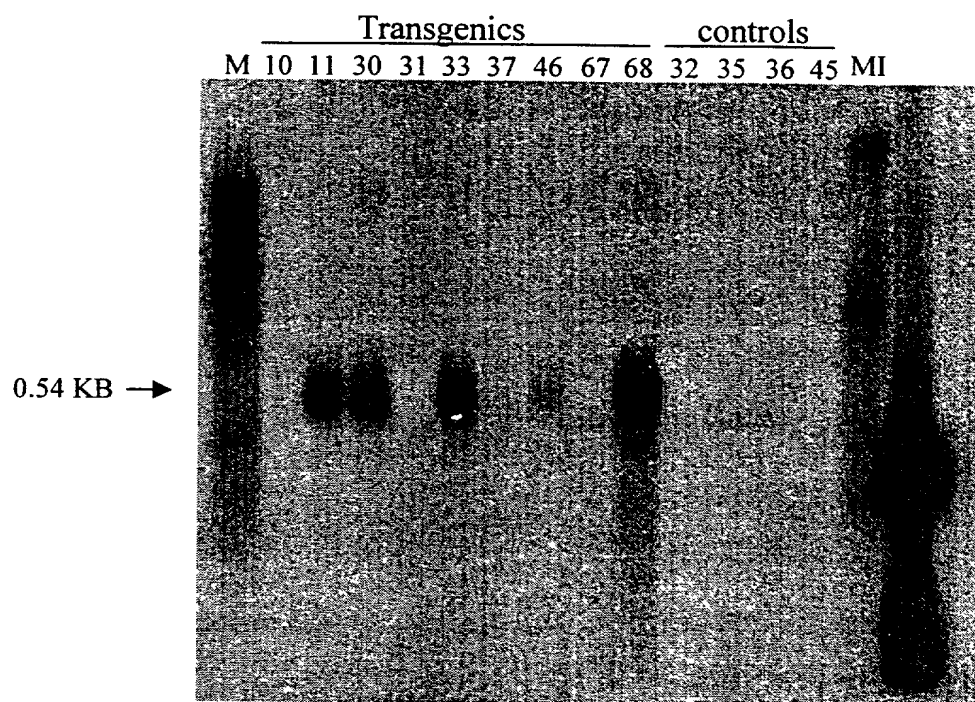


Figure 9

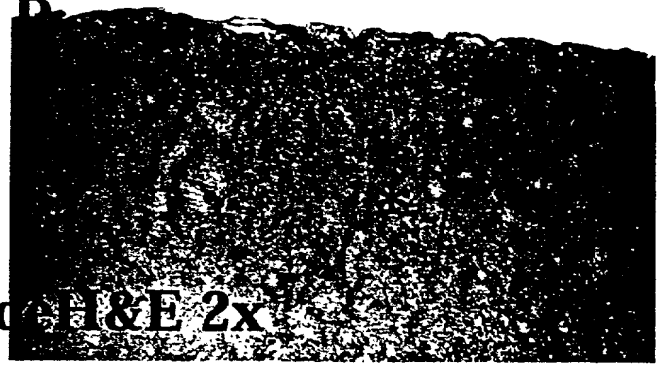
Non-Transgenics

IL-17E Transgenics

A

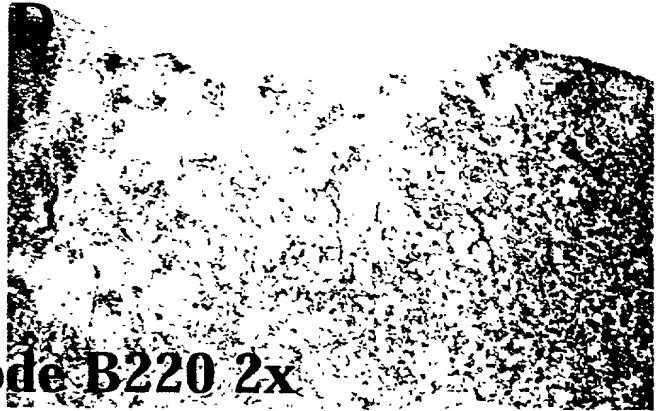
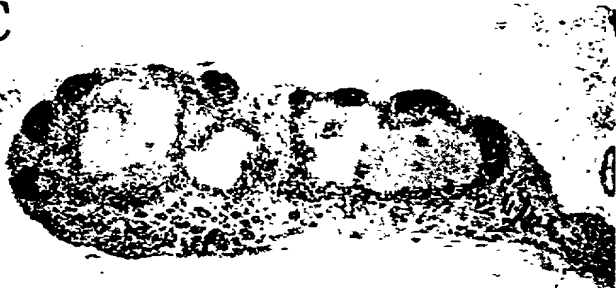


B



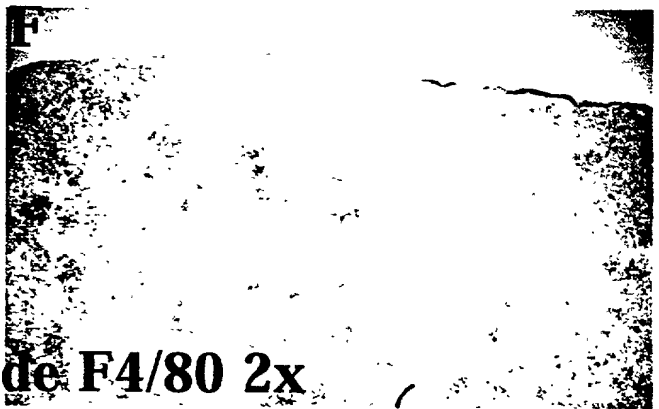
Lymph Node H&E 2x

C

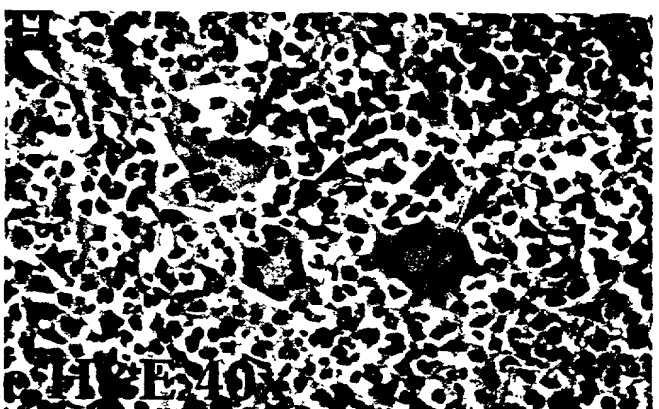


Lymph Node B220 2x

E



Lymph Node F4/80 2x



Lymph Node H&E 40x

Figure 10

Non-Transgenics

IL-17E Transgenics

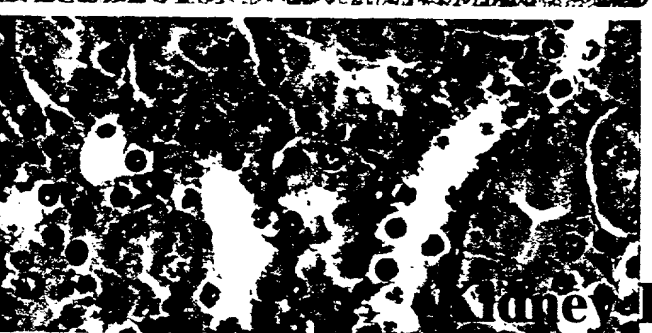
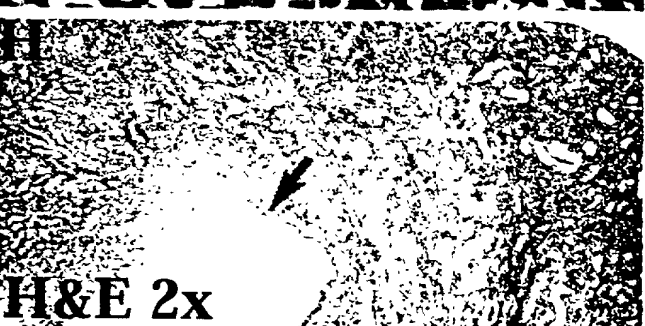
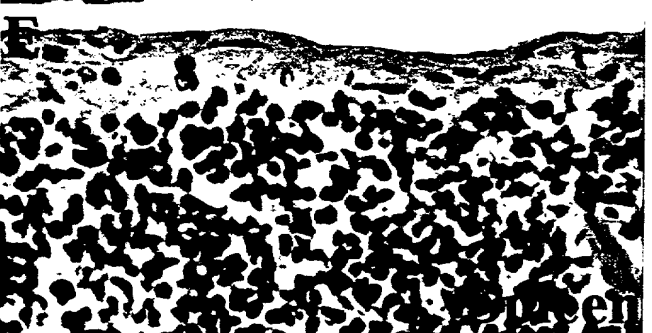
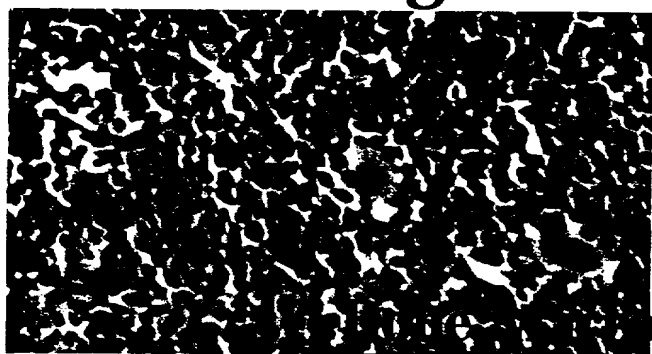


Figure 11

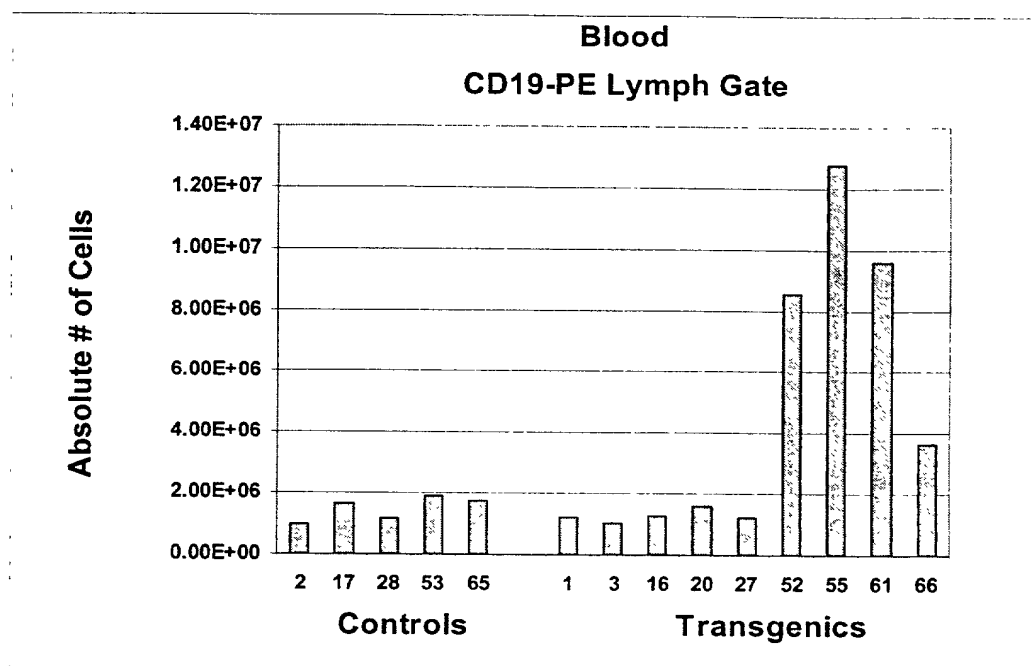


Figure 12

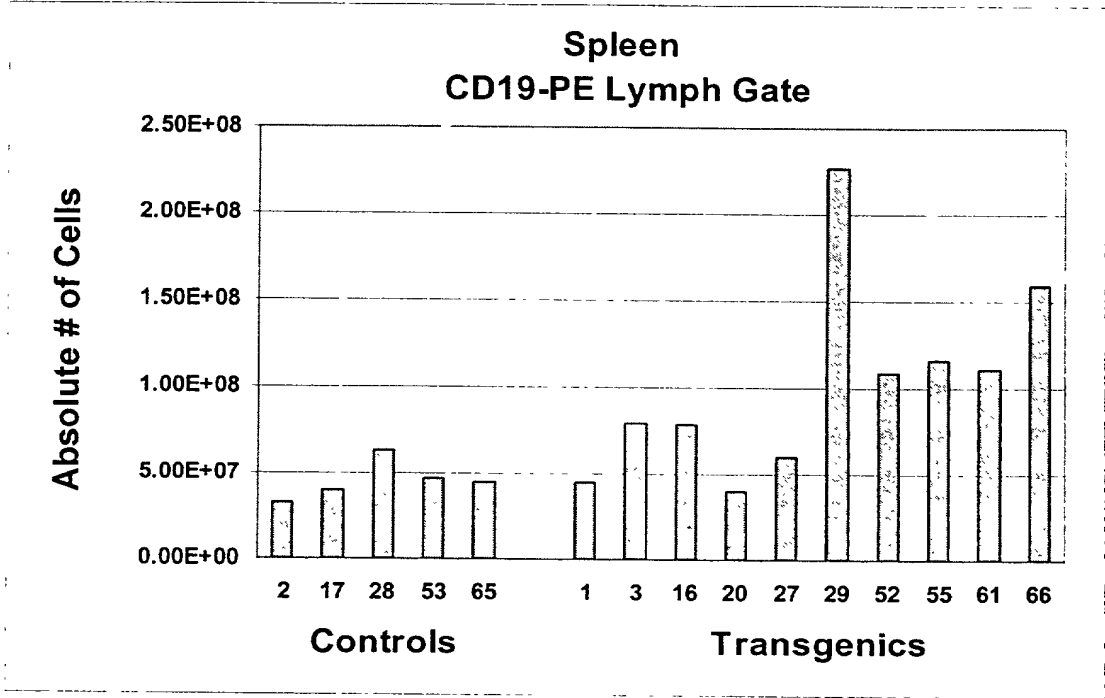


Figure 13

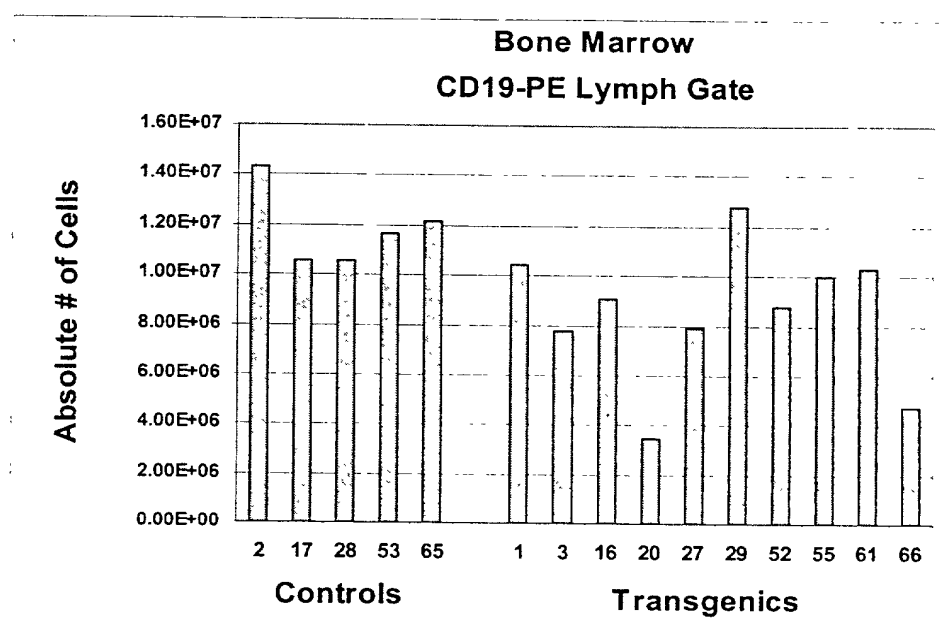


Figure 14

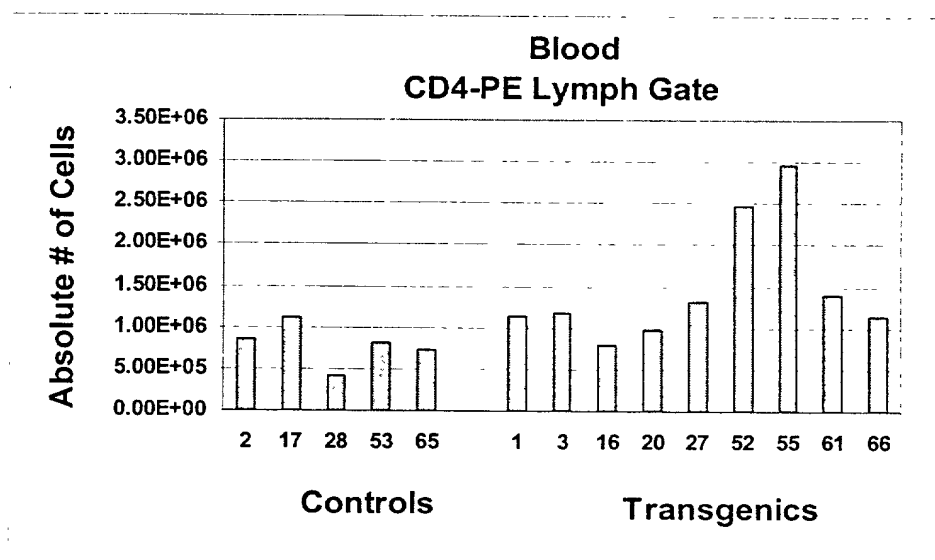


Figure 15

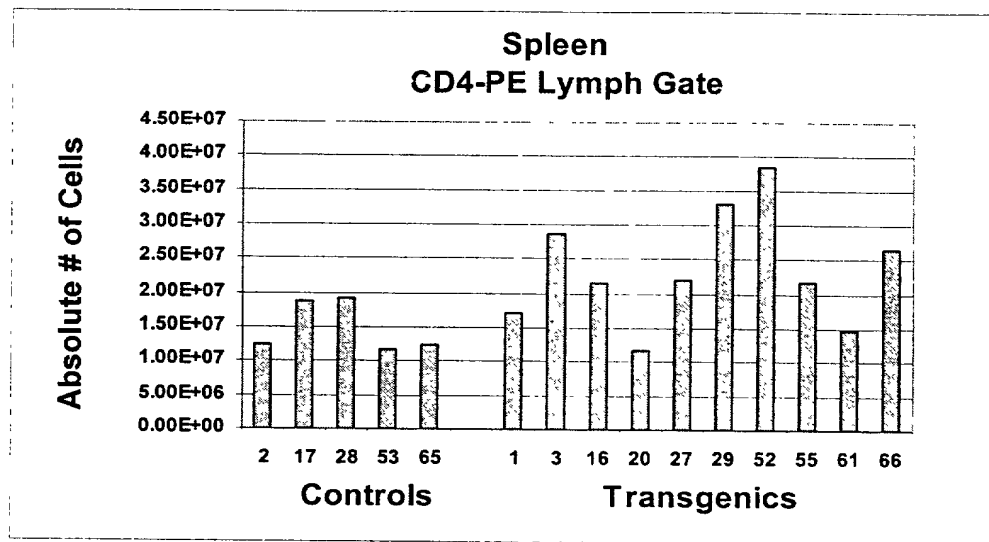


Figure 16

CD45R+ CELLS EXPRESSING IL17Br IN
TRANSGENIC BONE MARROW

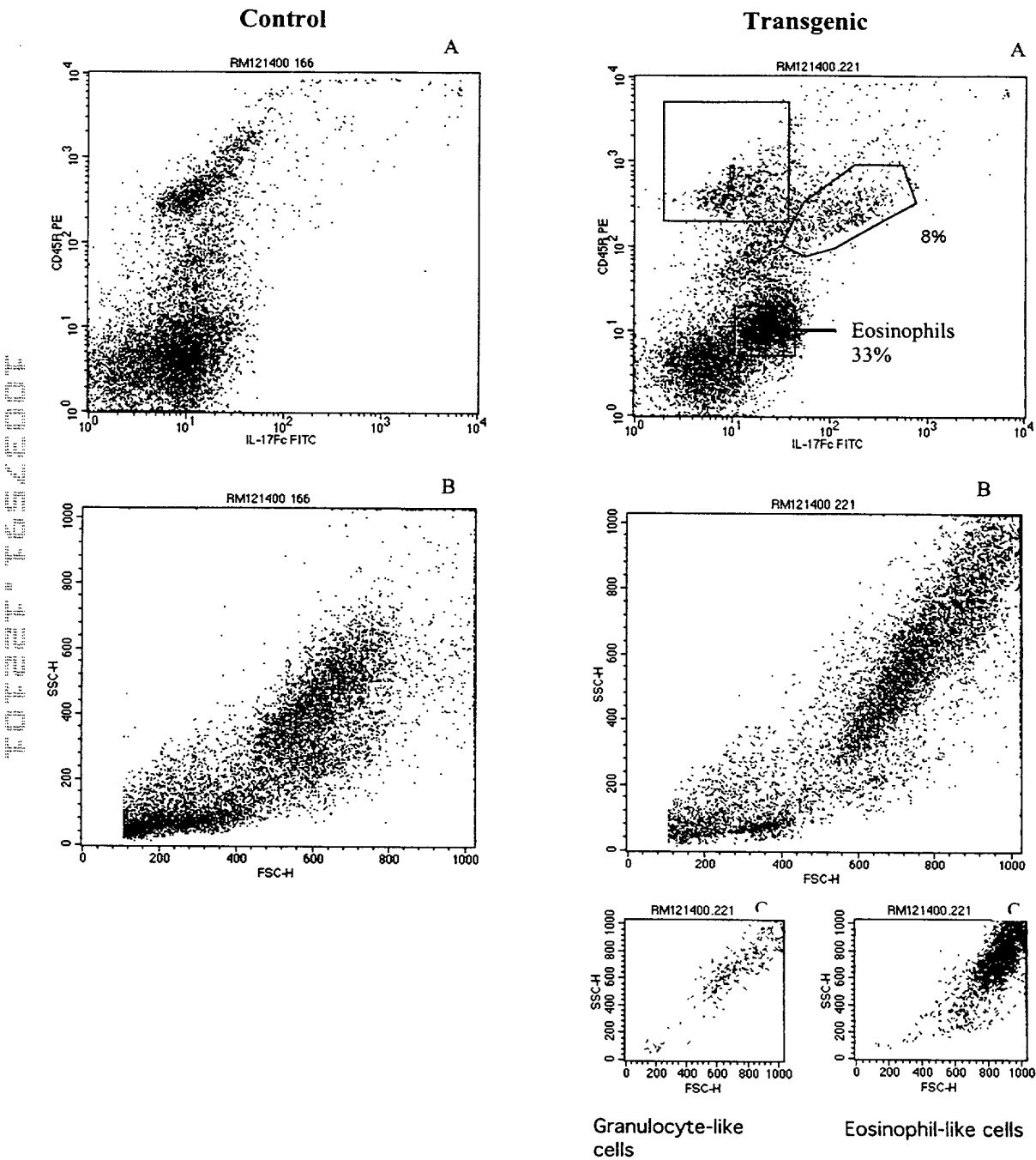


Figure 17

CD4+ CELLS EXPRESSING
IL17Br IN TRANSGENIC BONE
MARROW

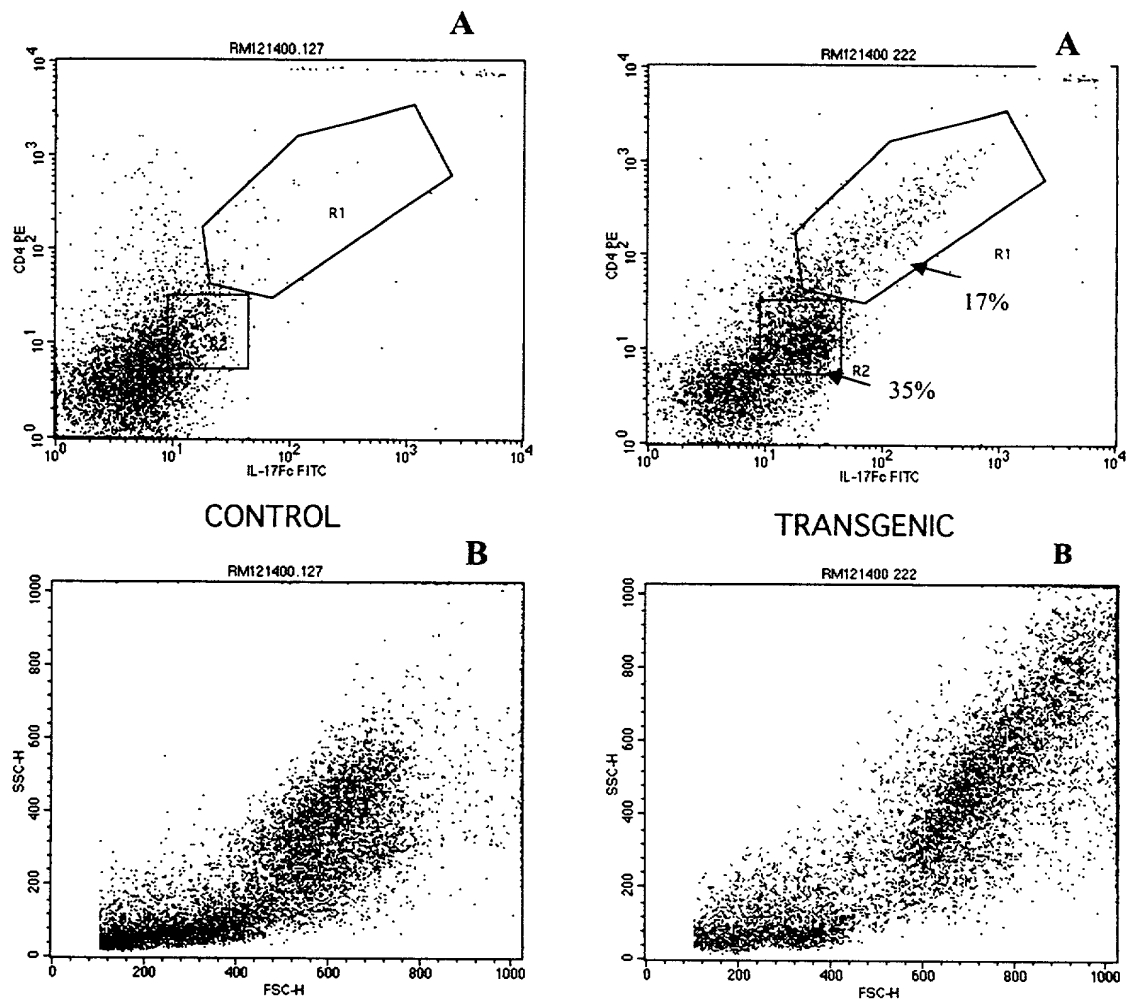


Figure 18

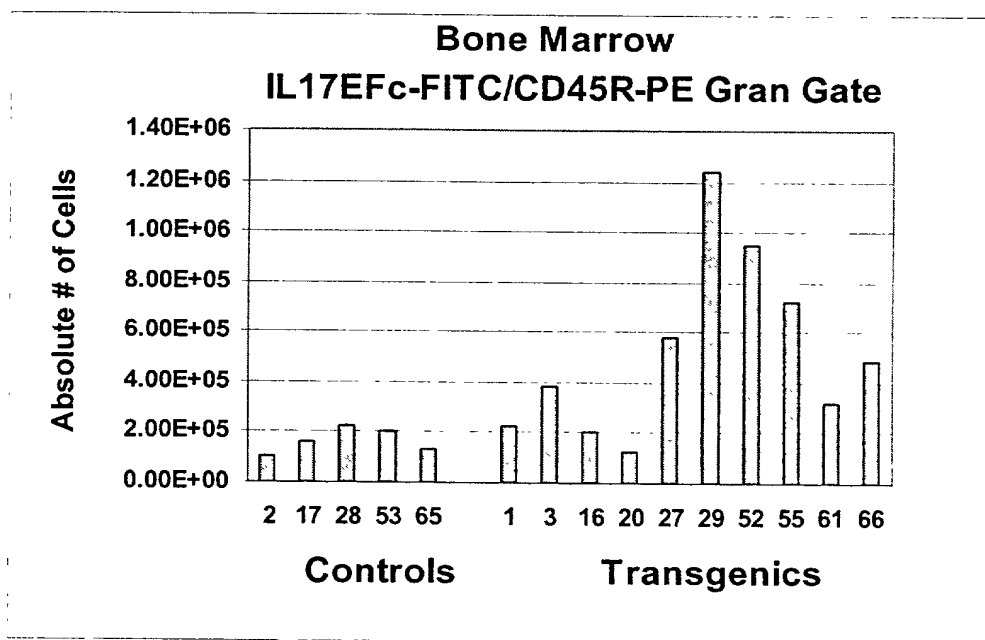


Figure 19

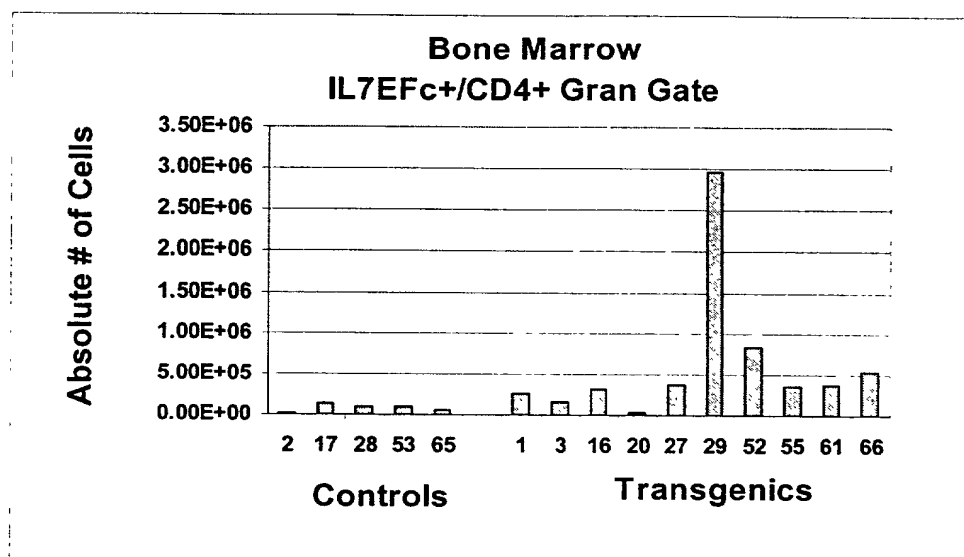
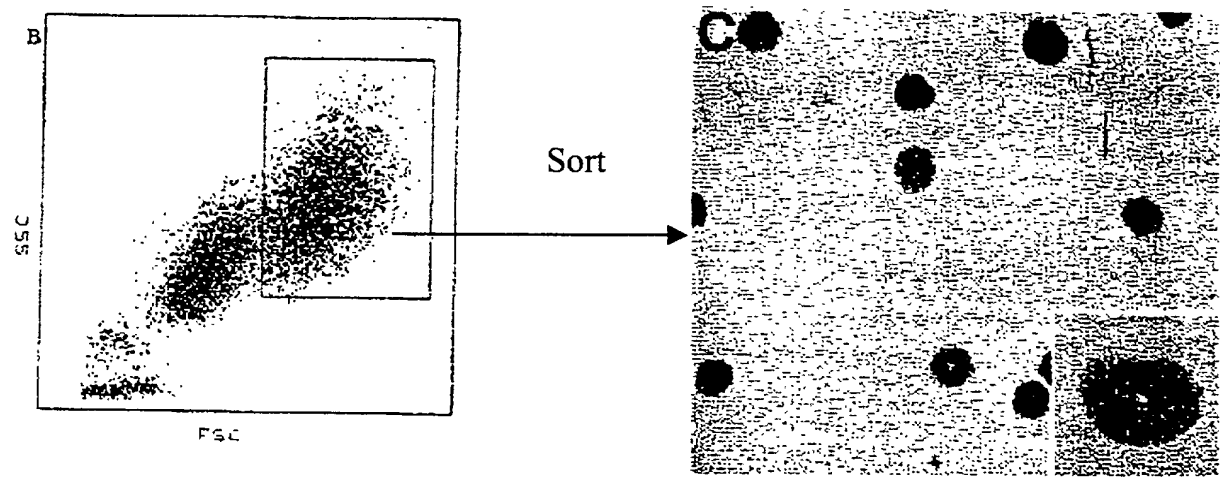


Figure 20

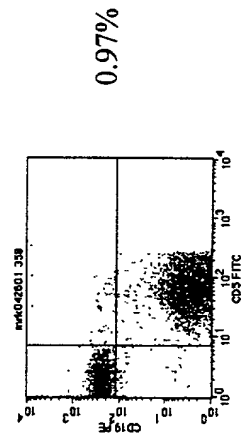


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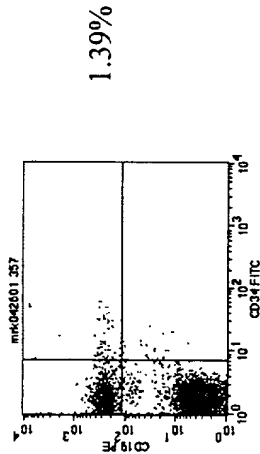
Figure 21A

Non-transgenic Control

CD5+ on CD19+ Lymphocytes in Lymph Node



CD34+ on CD19+ Lymphocytes in Lymph Node



Transgenic

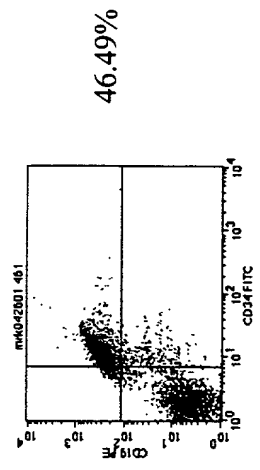
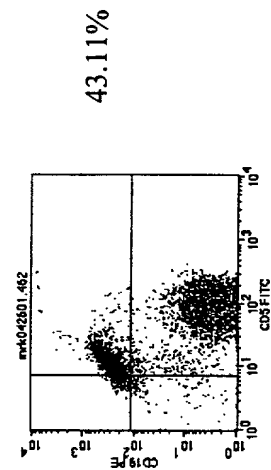


Figure 21B

CD4 Expression on Eosinophils in Bone Marrow

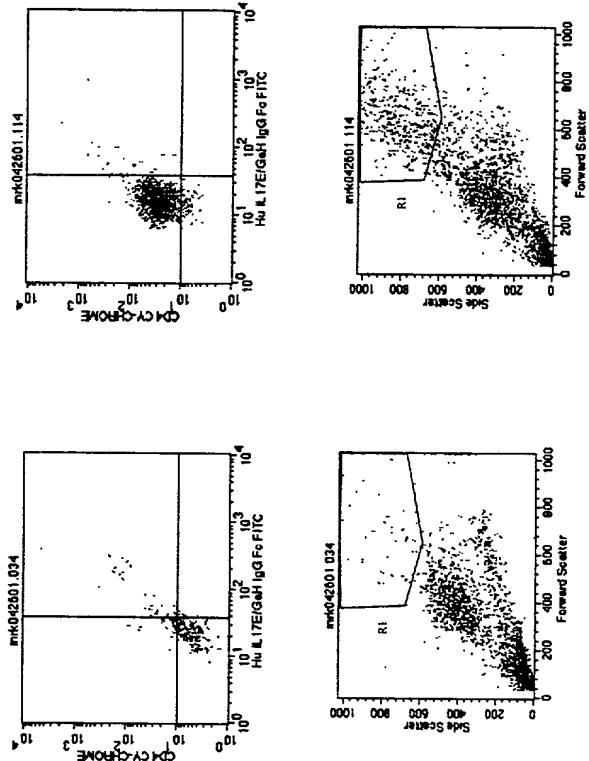


Figure 22

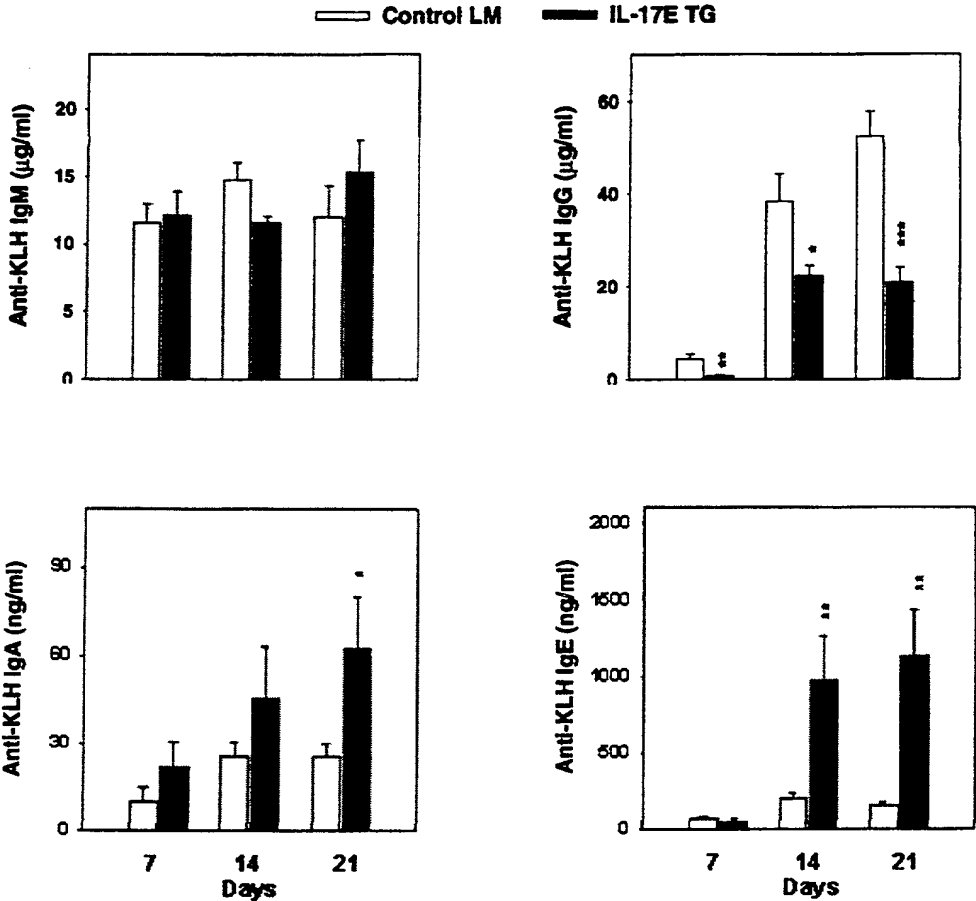


Figure 23

